

## IN THE CLAIMS

Claims 1-5 and 8-9 are pending in this application. Please amend claims 1-5 and 8-9 as follows:

1. (Amended) A display apparatus, comprising:
  - a display unit having a view angle-limiting filter on a surface thereof;
  - a rotary mechanism which rotates the display unit; and
  - ~~a control unit for implementing control so that when the display unit, rotated by the rotary mechanism, is faced to each of plural directions, the display unit displays a different text or image content associated with the direction.~~
  - a rotation range detection unit which detects a plurality of rotation ranges in one rotation of the display unit which is rotated by the rotary mechanism; and
  - a control unit which transmits information or image corresponding to each of the plurality of rotation ranges detected by the rotation detection unit to the display unit to display the information or the image on the surface of the display unit having the view angle limiting filter.
2. (Amended) [[A]] The display apparatus according to claim 1 wherein ~~the control unit includes an angle detection unit for detecting the plural directions the display unit is faced to~~ in the control unit, the information or the images are mutually different corresponding to the each of the plurality of rotation ranges detected by the rotation detection unit.
3. (Amended) A display apparatus, comprising:
  - A display unit having a view angle-limiting filter on a surface thereof;
  - a rotary mechanism which rotates the display unit;
  - a rotation range detection unit which detects a plurality of rotation ranges in one rotation of the display unit which is rotated by the rotary mechanism;
  - a viewer detection unit ~~for detecting~~ which detects a direction extending through a viewer; and
  - ~~a control unit for implementing control so that when the display unit, rotated by the rotary mechanism, is faced to the detected direction extending through a viewer, the display unit displays a text or image content associated with the detected direction~~ which transmits suitable information or suitable image for the direction extending through the viewer detected by the viewer detection unit to the display unit

when the rotation range of the display unit detected by the rotation range detection unit is faced to the detected direction, to display the suitable information or the image on the surface of the display unit having the view angle-limiting filter.

4. (Amended) [[A]] The display apparatus according to claim 1 wherein the display unit comprises a display which receives the information or the image transmitted by the control unit to display the information or the image.
5. (Amended) [[A]] The display apparatus according to claim 3 wherein the display unit comprises a display which receives the suitable information or the suitable image transmitted by the control unit to display the suitable information or the suitable image.
6. (Withdrawn) A display apparatus according to claim 1 wherein the display unit comprises a display screen to which text or image information is projected by an electronic projector.
7. (Withdrawn) A display apparatus according to claim 3 wherein the display unit comprises a display screen to which text or image information is projected by an electronic projector.
8. (Amended) [[A]] The display apparatus according to claim 1 wherein the control unit includes a memory unit ~~to store the text or image information to be displayed by the display unit~~ which stores the information or the images corresponding to the plurality of rotation ranges to display on the surface of the display unit, the control unit transmits the information on the image corresponding to each of the plurality of rotation ranges detected by the rotation range detection unit by reading out the information or the image from the memory unit.
9. (Currently Amended) A display apparatus according to claim 3 wherein the control unit includes a memory unit ~~to store the text or image information to be displayed by the display unit~~ which stores the information or the image corresponding to the plurality of rotation ranges to display on the surface of the display unit, the control unit transmits the suitable information or the suitable image for the direction

extending through the viewer by reading out the suitable information or the suitable image from the memory unit based on the rotation range being faced to the detect direction detected by the rotation range detection unit.

10. (Withdrawn) A display apparatus, comprising:
  - a screen having a view angle-limiting filter on a surface thereof;
  - a rotary mechanism which rotates the screen; and
  - an electronic projector which, when the screen, rotated by the rotary mechanism, is faced to each of plural directions, projects a different text or image content associated with the direction to the screen.
11. (Withdrawn) A display apparatus, comprising:
  - a screen having a view angle-limiting filter on a surface thereof;
  - a rotary mechanism which rotates the screen;
  - an electronic projector which projects an image comprising a plurality of text or image contents different from each other; and
  - a projection optical system in which the image projected from the electronic projector is divided into the plurality of text or image contents and each of the plurality of text or image contents is projected to the screen when the screen, rotated by the rotary mechanism, is faced to associated one of plural directions.
12. (Withdrawn) A display apparatus according to claim 10 wherein a three-dimensional image is formed by the plurality of text or image contents different from each other.
13. (Withdrawn) A display apparatus according to claim 11 wherein a three-dimensional image is formed by the plurality of text or image contents different from each other.
14. (Withdrawn) A display apparatus according to claim 10, further comprising an acquiring unit for acquiring the contents to be projected from the electronic projector and storing the contents in a memory unit;
  - wherein the acquiring unit reads out the contents stored in the memory unit so as to supply the contents to the electronic projector.

15. (Withdrawn) A display apparatus according to claim 11, further comprising an acquiring unit for acquiring the contents to be projected from the electronic projector and storing the contents in a memory unit;  
wherein the acquiring unit reads out the contents stored in the memory unit so as to supply the contents to the electronic projector.
16. (Withdrawn) A display apparatus according to claim 10, further comprising:  
a detection unit for detecting a rotation angle of the screen; and  
a control unit for controlling off time of the electronic projector in accordance with the detected rotation angle.
17. (Withdrawn) A display apparatus according to claim 11, further comprising:  
a detection unit for detecting a rotation angle of the screen; and  
a control unit for controlling off time of the electronic projector in accordance with the detected rotation angle.
18. (Withdrawn) A display apparatus, comprising:  
a display unit having a view angle-limiting filter on a surface thereof;  
a rotary mechanism which rotates the display unit; and  
a control unit for implementing control so that when the display unit, rotated by the rotary mechanism, is faced to each of plural directions, the display unit displays a different text or image content associated with the direction;  
wherein the view angle-limiting filter is configured to have an angle such that when a certain distance exists between a viewer and the display unit, the viewer's eyes view respective different pieces of text or image information on the display unit.
19. (Withdrawn) A display apparatus according to claim 10, further comprising:  
a projection mirror group of plural mirrors arranged cylindrically so as to surround the screen and a rotary axis of the rotary mechanism; and  
an overhead mirror mounted to a plane perpendicular to an extension of the rotary axis of the rotary mechanism;  
wherein the content projected from the electronic projector reaches the screen via the projection mirror group and the overhead mirror.

20. (Withdrawn) A display apparatus according to claim 11 wherein said projection optical system comprises a projection mirror group of plural mirrors arranged cylindrically so as to surround the screen and a rotary axis of the rotary mechanism and an overhead mirror mounted to a plane perpendicular to an extension of the rotary axis of the rotary mechanism, wherein the content projected from the electronic projector reaches the screen via the projection mirror group and the overhead mirror.
21. (Withdrawn) A display apparatus according to claim 10 wherein said screen is a directional reflection screen.
22. (Withdrawn) A display apparatus according to claim 11 wherein said screen is a directional reflection screen.
23. (Withdrawn) A display apparatus according to claim 10 wherein said screen is a semi-permeable screen.
24. (Withdrawn) A display apparatus according to claim 11 wherein said screen is a semi-permeable screen.
25. (Withdrawn) A display apparatus according to claim 23, further comprising:
  - a projection mirror group comprises plural mirrors which are arranged semi-cylindrically;
  - wherein the content projected from the electronic projector reaches the screen via the projection mirror group.
26. (Withdrawn) A display apparatus according to claim 24, wherein said projection optical system provides a projection mirror group which comprises plural mirrors which are arranged semi-cylindrically, wherein the content projected from the electronic projector reaches the screen via the projection mirror group.
27. (Withdrawn) A display apparatus according to claim 12, further comprising a sensor which detects a position or motion of a user;
  - wherein the content to be projected from the electronic projector is rotated in accordance with the detected position or motion of the user so as to change the

content to be projected to the screen from each direction and thereby rotate the formed three-dimensional image.

28. (Withdrawn) A display apparatus according to claim 13, further comprising a sensor which detects a position or motion of a user;

wherein the content to be projected from the electronic projector is rotated in accordance with the detected position or motion of the user so as to change the content to be projected to the screen from each direction and thereby rotate the formed three-dimensional image.

29. (Withdrawn) An image pickup apparatus picking up images for a display apparatus comprising a screen; a rotary mechanism for rotating the screen; and a projection mirror group of plural mirrors arranged cylindrically by which the images projected from a projector is reflected to the rotating screen; wherein the images reflected to the rotating screen are formed as a three-dimensional image, said image pickup apparatus comprising:

an image pickup mirror group which is arranged cylindrically in the same manner as the projector mirror group so as to surround an object and which has the same number of mirrors as the projector mirror group; and

an image pickup unit which picks up an image group of the object as a single image for said display apparatus after the image group is reflected by the image pickup mirror group.

30. (Withdrawn) An image pickup apparatus according to claim 29 wherein the cylindrical diameter and mirror size of said image pickup mirror group are determined depending on the size of said object independently of those of said projection mirror group.

31. (Withdrawn) An image pickup apparatus according to claim 29, further comprising a communication unit communicating with the display apparatus, wherein the image picked up for the display apparatus is transmitted from the communication unit to the display apparatus.